Ministry of Northern Development and Mines

Ontario

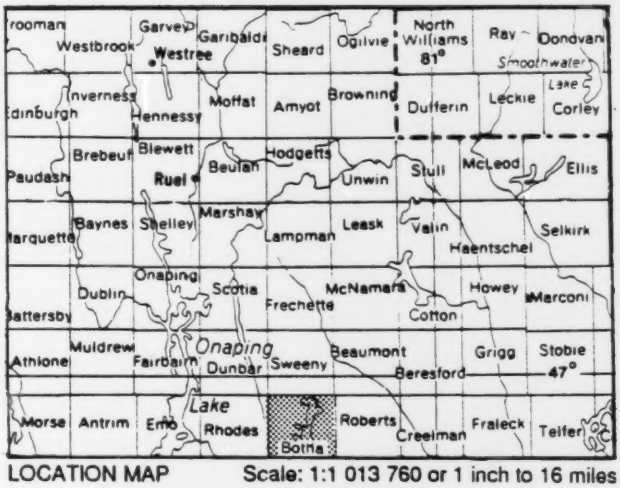
Mines and Minerals Division

ONTARIO GEOLOGICAL SURVEY

GEOLOGICAL DATA INVENTORY FOLIO 485

BOTHA TOWNSHIP

Compiled by the Staff of
the Resident Geologist's Office
Sudbury



LOCATION MAP Scale: 1:1 013 760 or 1 inch to 16 miles

CANADA ONTARIO Mineral Development Exploration Minérale

This project is part of the five year Canada–Ontario 1985 Mineral Development Agreement (COMDA), a subsidiary agreement to the Economic and Regional Development Agreement (ERDA) signed by the governments of Canada and Ontario.

90-01092

NTS Number 41 I/14

Mining Claim Map Number M.674

This project was funded under the Canada-Ontario Mineral Development Agreement (COMDA)

STATEMENT: This inventory is unedited. Discrepancies may occur for which the Ontario Geological Survey does not assume liability. Information from this source may be quoted if credit is given. Reference to this inventory should be made as follows:

Ontario Geological Survey 1989. Botha Township, Geological Data Inventory Folio 485; compiled by the staff of the Resident Geologist's office, Sudbury.

Original Compilation by: Jerome, Lucille, June 1988

Date	Page Revised	Revised by

Date	Page Revised	Revised by

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CONVERSION FACTORS FOR MEASUREMENTS IN ONTARIO GEOLOGICAL SURVEY PUBLICATIONS

If the reader wishes to convert imperial units to SI (metric) units or SI units to imperial units the following multipliers should be used:

CONVERSION FROM SI TO IMPERIAL			CONVERSION FROM IMPERIAL TO SI		
SI Unit	*Multiplied by*	*Gives*	*Imperial Unit*	*Multiplied by*	*Gives*
			LENGTH		
1 mm	0.039 37	inches	1 inch	**25.4**	mm
1 cm	0.393 70	inches	1 inch	**2.54**	cm
1 m	3.280 84	feet	1 foot	**0.304 8**	m
1 m	0.049 709 7	chains	1 chain	20.116 8	m
1 km	0.621 371	miles (statute)	1 mile (statute)	**1.609 344**	km
			AREA		
1 cm^2	0.155 0	square inches	1 square inch	**6.451 6**	cm^2
1 m^2	10.763 9	square feet	1 square foot	**0.092 903 04**	m^2
1 km^2	0.386 10	square miles	1 square mile	2.589 988	km^2
1 ha	2.471 054	acres	1 acre	0.404 685 6	ha
			VOLUME		
1 cm^3	0.061 02	cubic inches	1 cubic inch	**16.387 064**	cm^3
1 m^3	35.314 7	cubic feet	1 cubic foot	0.028 316 85	m^3
1 m^3	1.308 0	cubic yards	1 cubic yard	0.764 555	m^3
			CAPACITY		
1 L	1.759 755	pints	1 pint	0.568 261	L
1 L	0.879 877	quarts	1 quart	1.136 522	L
1 L	0.219 969	gallons	1 gallon	**4.546 090**	L
			MASS		
1 g	0.035 273 96	ounces (avdp)	1 ounce (avdp)	28.349 523	g
1 g	0.032 150 75	ounces (troy)	1 ounce (troy)	**31.103 476 8**	g
1 kg	2.204 62	pounds (avdp)	1 pound (avdp)	**0.453 592 37**	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	**907.184 74**	kg
1 t	1.102 311	tons (short)	1 ton (short)	**0.907 184 74**	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	**1016.046 908 8**	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	**1.016 046 908 8**	t
			CONCENTRATION		
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	34.285 714 2	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	1.714 285 7	g/t

OTHER USEFUL CONVERSION FACTORS

1 ounce (troy)/ton (short)	20.0	pennyweights/ton (short)
1 pennyweight/ton (short)	0.05	ounce (troy)/ton (short)

One gram(g) per tonne is equivalent to one part per million (1 ppm).

NOTE–Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries published by The Mining Association of Canada in co-operation with the Coal Association of Canada.

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ACCOMPANYING MAPS

Property Location Map 1

Exploration Data Map 1

Map Scale 1: 31 680 or 1 inch to ½ mile

DATA SOURCES CHECK LIST

NOTE: The following sources have been searched to compile the data for this area. If no reference data was found the appropriate box is marked 'no'; if reference data was found, the box is marked 'yes'.

All reference data found are included in the following pages. If the box is blank, the data source has not yet been searched. If the box is marked N.A., the source item is Not Applicable to this area and therefore not searched.

	SOURCES OF DATA	Data	Initial
1	Resident Geologist's Office Files	Yes	L.J.
2	Assessment Files Research Office, Toronto	N.A.	L.J.
3	ODM General Index; 9 Volumes	Yes	L.J.
4	Catalogue of Airborne Geophysical Surveys (ODM)	No	L.J.
5	ODM Mineral Resources Circulars and OGS Mineral Deposits Circulars	Yes	L.J.
6	ODM Industrial Mineral Reports	No	L.J.
7	Bibliography of Post Precambrian Theses - Karrow (ODM MP 1)	No	L.J.
8	Bibliography of Precambrian Theses - Ginn (ODM MP 2)	Yes	L.J.
9	Newspaper Clippings File	No	L.J.
10	GSC Index to Publications	No	L.J.
11	OGS Index to Published Maps and Reports - MP 77 and Supplements to MP 77	Yes	L.J.
12	OGS Index Maps	Yes	L.J.
13	Source Mineral Deposit Records (O.G.S.)	Yes	L.J.
14	Author - Subject Articles File	Yes	L.J.
15	Miscellaneous Papers: ODM & OGS	Yes	L.J.
16	ODM Geological Circulars: OGS Study Series	No	L.J.
17	ODM Preliminary Reports: ODM Bulletins	No	L.J.
18	ODM – OGS Open File Reports	Yes	L.J.
19	OGS Northern Ontario Engineering Geology Terrain Studies	Yes	L.J.
20	OGS Aggregate Resources Inventory Papers	No	L.J.
21	OGS Mineral Potential Maps	Yes	L.J.
22	Theses on File, Sudbury	Yes	L.J.
23	Aerial Photographs on File, Sudbury	Yes	L.J.

METALS AND MINERALS REFERENCES LIST

- △ anh. . . . . .Anhydrite
- △ ank. . . . . .Ankerite
- △ anna . . . . . Annabergite
- △ ap. . . . . .Apatite
- △ arg . . . . . Argentite
- △ As . . . . . .Arsenic
- △ asp . . . . . .Arsenopyrite
- △ asb . . . . . .Asbestos
- △ ba. . . . . .Barite
- △ be. . . . . .Beryl
- △ Bi. . . . . .Bismuth
- △ bn . . . . . .Bornite
- △ bran . . . . . .Brannerite
- △ bruc . . . . . .Brucite
- △ Cd . . . . . Cadmium
- △ calc. . . . . .Calcite
- △ carb . . . . . .Carbonate
- △ cel . . . . . .Celestite
- △ cc. . . . . .Chalcocite
- △ cp. . . . . .Chalcopyrite
- △ ch. . . . . .Chert
- △ clay . . . . . .Clay
- △ Co . . . . . Cobalt
- △ cob. . . . . Cobaltite
- △ cb. . . . . .Columbite
- ▲ Cu . . . . . .Copper
- △ cor . . . . . Corundum
- △ dol . . . . . Dolomite
- △ ep. . . . . Epidote
- △ ery . . . . . Erythrite
- △ fel . . . . . .Feldspar
- △ fl . . . . . .Fluorite (flurospar)
- △ fu. . . . . .Fuchsite
- △ gn. . . . . .Galena
- △ gt. . . . . .Garnet
- △ goe . . . . . .Goethite
- ▲ Au . . . . . Gold
- △ gf. . . . . .Graphite
- △ gl . . . . . Gravel
- △ gyp. . . . . .Gypsum
- △ hem . . . . . Hematite
- △ il . . . . . .Ilmenite
- ▲ Fe . . . . . .Iron
- △ IF. . . . . Iron Formation
- △ jas . . . . . Jasper
- △ kaol . . . . . .Kaolinite (kaolin)
- △ ky . . . . . Kyanite
- ▲ Pb . . . . . Lead
- △ lim . . . . . Limonite
- △ Li. . . . . Lithium
- △ mgst . . . . . .Magnesite
- △ mag . . . . . .Magnetite
- △ mc . . . . . Malachite
- △ Mn . . . . . Manganese
- △ mb . . . . . .Marble
- △ mar. . . . . Marcasite
- △ ma . . . . . .Marl
- △ mi . . . . . Mica
- △ ml . . . . . .Millerite
- △ mo . . . . . Molybdenite
- △ Mo . . . . . .Molybdenum
- △ mon . . . . . Monazite
- △ ne. . . . . Nephelite (nepheline)
- △ nc. . . . . .Niccolite
- △ Ni. . . . . Nickel
- △ Nb . . . . . .Niobium
- △ Pd . . . . . .Palladium
- △ peat . . . . . .Peat
- △ pent . . . . . .Pentlandite
- △ Pt. . . . . .Platinum
- △ py . . . . . .Pyrite
- △ pyl . . . . . Pyrochlore
- △ pyrl . . . . . .Pyrolusite
- △ po . . . . . .Pyrrhotite
- △ q . . . . . .Quartz
- △ qcv . . . . .Quartz carbonate vein
- △ ra. . . . . .Radioactive minerals
- △ RE . . . . . .Rare Earths
- △ sd. . . . . Sand
- △ sgl . . . . . Sand and gravel
- △ ss . . . . . .Sandstone
- △ scap . . . . . Scapolite
- △ shee . . . . . .Scheelite
- △ serp . . . . . Serpentine
- △ sh. . . . . .Shale
- △ sid . . . . . Siderite
- △ si . . . . . .Silica
- ▲ Ag . . . . . .Silver
- △ sl . . . . . Slate
- △ sm . . . . . .Smaltite
- △ sod . . . . . Sodalite
- △ spec . . . . . Specularite
- △ sp. . . . . .Sphalerite
- △ spd . . . . . .Spodumene
- △ staur . . . . . .Staurolite
- △ stib. . . . . Stibnite
- △ st . . . . . .Stone
- △ talc. . . . . .Talc
- △ Te . . . . . .Tellurium
- △ td. . . . . Tetrahedrite
- △ th. . . . . .Thorite
- △ Th . . . . . .Thorium
- △ thuc . . . . . Thucholite
- △ ti . . . . . Titanite
- △ Ti. . . . . Titanium
- △ tour . . . . . .Tourmaline
- △ trap . . . . . .Trap rock
- △ W. . . . . Tungsten
- △ uran . . . . . Uraninite
- △ U . . . . . .Uranium
- △ verm . . . . . .Vermiculite
- △ Y . . . . . Yttrium
- ▲ Zn . . . . . .Zinc
- △ zr. . . . . Zircon

Solid triangles indicate metal and mineral occurrences shown on the accompanying maps.

MINERAL OCCURRENCES

Map Ref. Letter	Name(s)	Mineralization	Source Mineral Deposit Record	References in OGS Mineral Deposits Circulars & OGS Industrial Mineral Reports	Additional References and/or Remarks
A	Holmstrom, T. Venetian Lake Prospect	Zn, Pb, Cu, Ag, Au	Cu 1	MRC 2, p. 103 MRC 12, p. 232	Botha 0010-D1 GR 196, pp. 45-46 PR 1952-4, p. 16
B	McGrindle Lake Occurrence	Fe	Fe 3	MRC 11, p. 327	GR 196, p. 43
C	Sandfly Lake/ South Lake Occurrence	Fe	Fe 3	MRC 11, p. 326	GR 196, pp. 43-44

4. BOTHA TOWNSHIP

TYPE OF WORK		Numbers below represent the year in which the work was done; e.g., 68 for 1968.																		
EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE SUDBURY COMPANY/AUTHOR (file number)		GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY			
1	Osisko Lake Mines Ltd. (Botha 0010-A1)				51															
2	Holmstrom, T. (Botha 0010-D1)	50		49		49						38[1]	38[1]							
3	Tronco Mining and Smelting Ltd. (Botha 0011-A1)			59								62								
4	Explorers Alliance Ltd. (Botha 0011-B1)											57								

[1] No data

GDIF FORM NO. 2

BOTHA TOWNSHIP

DRILLHOLE SUMMARY

Map Drilling Location Number	Company Name	Company Drillhole Number	Date Drilled	Bearing Azimuth	Initial Dip of Hole	Thickness of Overburden	Total Length of Hole	Mineralization Noted in Log	Assay Data Included for
1	Osisko Lake Mines Ltd.	1	1951	045	40	6'	416'	py,po,cp,Zn,Pb, mag, mo	
1		2	1951	045	40	13'	359'	py,po,cp,Zn,Pb	
2		3	1951	045	45	22'	504'	py,po,cp,Zn	
3		5	1951	045	60	8'	487'	py,po,cp,Zn,Pb, mag, mo	
4		6	1951	045	40	8'	524'	py,po,cp,Zn,Pb	
5		7	1951	045	40	41'	596'	py,cp,Zn,Pb	
6		8	1951	045	45	15'	286'	py,po,cp,Zn,Pb, mo	

AIRBORNE GEOPHYSICAL SURVEY DATA

No.	By For	Type of Survey	Flight Altitude	Flight Line Direction	Flight Line Spacing

GDIF FORM NO. 4

BOTHA TOWNSHIP

Map Sample Site Reference Number	GEOCHEMICAL SURVEY DATA		By	Reference
	Type of Survey	Analysis For		

GDIF FORM NO. 5

MISCELLANEOUS DATA

AGE DATING

Site	Method	Material	Reference	Result

NEWSPAPER CLIPPINGS FILE

NOTE: A file of newspaper clippings about the companies listed below, who have worked in this area is maintained in the Regional Resident Geologist's Office

ODM GENERAL INDEX SEARCH

Words searched:

BOTHA TOWNSHIP
EXPLORERS ALLIANCE LTD.
HOLMSTROM, T.
IRONCO MINING & SMELTING LTD.
McGRINDLE LAKE OCCURRENCE
OSISKO LAKE MINES LTD.
SANDFLY LAKE
SOUTH LAKE
VENETIAN LAKE PROSPECT

Index Volume	Listing:	Report Volume	Part	Page
2	Botha Tp., Sud. Iron formation, lean	I.O.		206
2	Osisko Lake Mines Ltd. Capital and date of charter	35	1	59
2	Sandfly Lake, Botha Tp. Iron formation	I.O.		206
6	Explorers Alliance Ltd. Name changed	66	1	36
8	Botha, Rhodes & Emo Tps., Sudbury Dist. Summary of field work, 1975 by B. Dressler	MP 63		88-90
8	Botha Tp., Sudbury Dist. Iron Lead/zinc/silver	MRC 11 MRC 12		326-327 232-233
8	Expl. Alliance Ltd. Botha Tp., Sudbury Dist.	MP 63		89
8	Holmstrom Showing Botha Tp., Sudbury Dist. mining property, report on	MP 63		89, 90
8	Osisko Lakes Mines Ltd. Botha Tp., Sudbury Dist.	MP 63		89
8	Venetian Lake Prospect Botha Tp., Sudbury Dist.	MRC 12		232-233
9	Holmstrom, T. Botha Tp., Sudbury Dist. report on property	GR 196		42-43, 44,45-47
9	McGrindle Lake Roberts & Botha Tps., Sudbury Dist.	GR 196		9, 41
9	McGrindle Lake Occurrence Botha Tp., Sudbury Dist. report on property	GR 196		43

GDIF FORM NO. 8

ODM GENERAL INDEX SEARCH

Words searched:

Index Volume	Listing:	Report Volume	Part	Page
9	Rhodes, Botha, Emo Tps., Sudbury Dist.			
	Geology of the area			
	report & map 2413 on, 1980			
	by B. Dressler	GR 196		
	iron	GR 196		41-45
	lead/zinc/copper	GR 196		46-47
	sand/gravel	GR 196		47
9	Sandfly Lake Occurrence			
	Rodes & Botha Tps., Sudbury Dist.			
	report on property	GR 196		43-44

GDIF FORM NO. 8

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
		REGIONAL GEOLOGICAL COMPILATION MAPS		
Card, K. D.	1965,67	Cartier Sheet	ODM Map P.287	1" = 2 miles
Card, K. D., Lumbers, S.B.	1974,75	Sudbury-Cobalt Geological Compilation (revised)	OGS Map 2361	1" = 4 miles
Dressler, B.	1976	Botha Township	Map P.1091	1" = 1/4 mile
	1979	Emo, Rhodes and Botha Townships	OGS Map 2413	1" = 1/2 mile
		GEOPHYSICAL MAPS		
GSC - ODM	1965	Aeromagnetic map - Venetian Lake	1519G	1" = 1 mile
Gupta, V. K.	1981	Bouguer Gravity and Generalized Geological Map of the Sudbury-Onaping Lake Area	OGS Map P.2482	1:100 000
ODM - GSC	1965	Aeromagnetic Map - Sudbury Sheet	7067G	1" = 4 miles
	1976	Uranium Reconnaissance Program Airborne Gamma Ray Spectrometer Survey, Sudbury	Map P.1610	1:250 000
		SURFICIAL, PLEISTOCENE, TERRAIN ENGINEERING		
EMR	1975	Topographic Map - Venetian Lake	41 I/14	1:50 000
Gartner, J. F.	1980	NOEGTS Data Base Map, Cartier	Map 5000	1:100 000
		NOEGT Study 94, Cartier Area		
		NOEGTS General Construction Capability Map, Cartier	Map 5004	1:100 000
Sado, E.V, Carswell, B.F.	1987	Surficial Geology of Northern Ontario	OGS Map 2518	1:1 200 000

GDIF FORM NO.9

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
		MINERAL POTENTIAL MAPS		
Meyn, H. D.	1975	Iron Deposits of Ontario, East Central Sheet	OGS Map P.1043	1" = 16 miles
Springer, J.	1977	Ontario Mineral Potential, Northern Part of Sudbury Sheet and Part of North Bay Sheet	OGS Map P.1512	1:250 000
		GEOCHEMICAL MAPS		
		No data available as of June 21, 1988		
		GEOLOGICAL REPORTS AND MAPS		
Adlington, R.	1982	Botha Township - Sudbury Data Series	OGS Map P.2466	1" = 1/4 mile
Dressler, B.	1977	Geology of Emo, Rhodes and Botha Townships	OFR 5224	
	1980	Geology of Emo, Rhodes and Botha Townships	GR 196	
Shklanka, R.	1968	Iron Deposits of Ontario	MRC 11	
	1969	Copper, Nickel, Lead and Zinc Deposits of Ontario	MRC 12	
Thomson, J. E. et al	1957	Copper, Nickel, Lead and Zinc Deposits in Ontario	MRC 2	
		JOURNALS, ARTICLES, THESES AND TECHNICAL REPORTS		
Chandler, F. W.	1986	Sedimentology and Paleoclimatology of the Huronian (Early Aphebian) Lorrain and Gordon Lake Formations and their Bearing on Models for Sedimentary Copper Mineralization	GSC Paper 86-1A	pp. 121-132

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
Dupuis, L., Whitehead, R. E., Davies, J. F.	1982	Evidence for a Genetic Link Between Sudbury Breccias and Fenite Breccias	CJES Vol. 19	pp. 1174-1184
Eade, K. E.	1950	The Huronian Rocks of Northwestern Ontario; M. Sc., McGill University	MP 2	
Fairbairn, H. W., Robson, G. M.	1942	Breccia at Sudbury, Ontario	Jour. of Geology, Vol. 50	pp. 1-33
Hadley, D. G.	1968	The Sedimentology of the Huronian Formation Ontario and Quebec, Canada	Theses on File	
Lindsey, D. A.	1969	Glacial Sedimentology of the Precambrian Gowganda Formation, Ontario, Canada	GSA Bull. 80	pp. 1685-1702
Roscoe, S. M.	1969	Huronian Rocks and Uraniferous Conglomerates in the Canadian Shield	GSC Paper 68-40	

BOTHA TOWNSHIP

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages

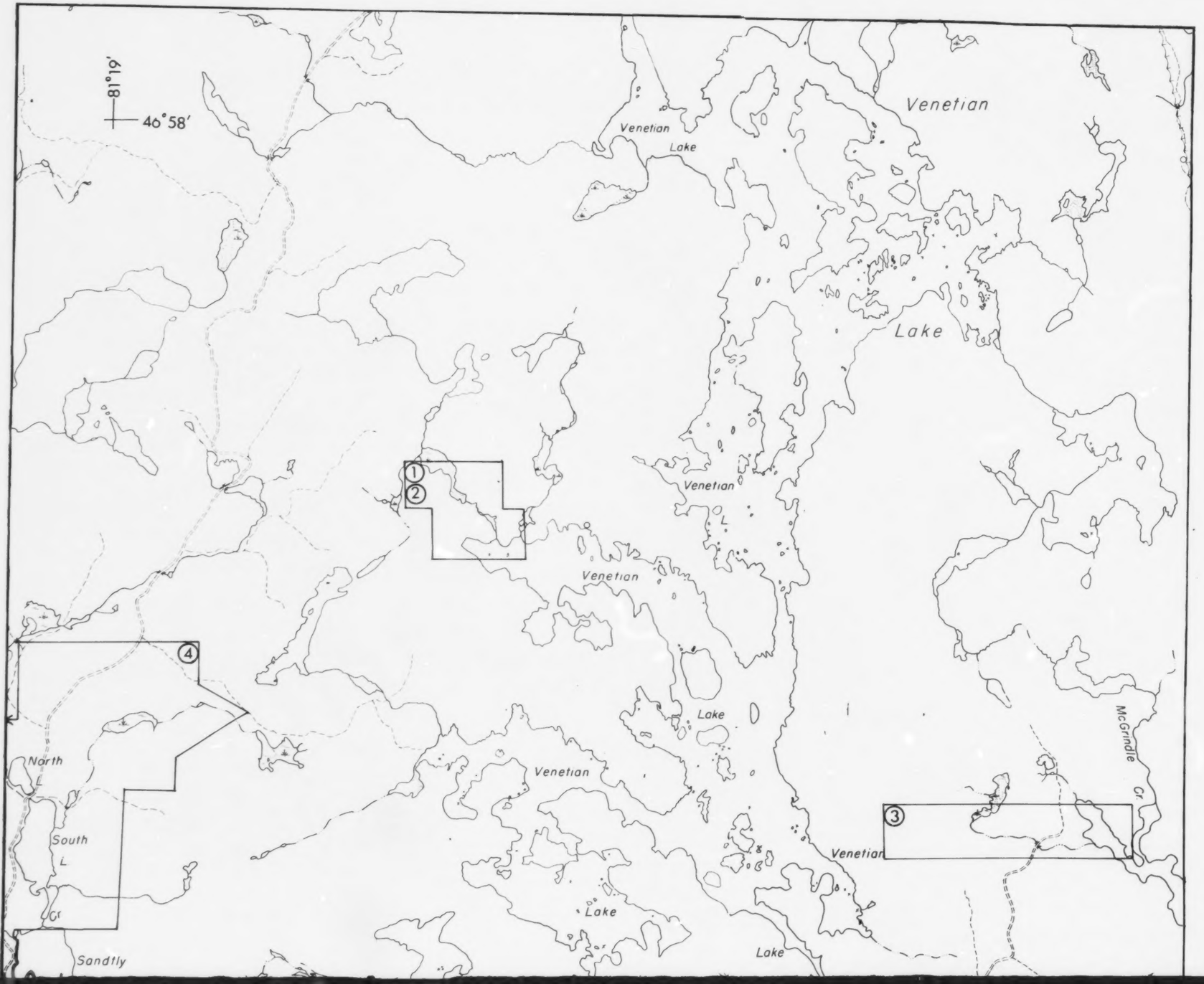
GDIF FORM NO. 9

NOTES AND ADDENDA

AERIAL PHOTOGRAPHS

1" = 1/4 mile

Year	Roll	Line	Number
1973	30	4640	181 - 187
	29	4639	172 - 176
	28	4638	261 - 266
	28	4637	69 - 75



Ontario

Ministry of Northern Development and Mines

Mines and Minerals Division

ONTARIO GEOLOGICAL SURVEY

PROPERTY LOCATION MAP

GEOLOGICAL DATA INVENTORY FOLIO 485

(Map 1 of 2)

BOTHA TOWNSHIP

Scale 1:31 680

Kilometre 0.5 0 0.5 1 Kilometre

Mile 0.5 0 0.5 1 Mile

BOTHA TOWNSHIP

Scale 1:31 680

Kilometre 0.5 0 0.5 1 Kilometre

Mile 0.5 0 0.5 1 Mile

Lake

Venetian

Venetian

Lake

Venetian

Venetian

Lake

Lake

North

South L

Sandfly L

Towchain

McGrindle Cr

81°13'

46°53'

EXPLORATION DATA FILE AREAS

■ ① ⑤ Reference number is always inside work area outlined. See listing in text pages.

□ x ④ Small area of exploration

□ ★ File covers whole township or area

TYPES OF DATA SHOWN ON THIS MAP

GEOCHEMICAL AND GEOCHRONOLOGICAL DATA

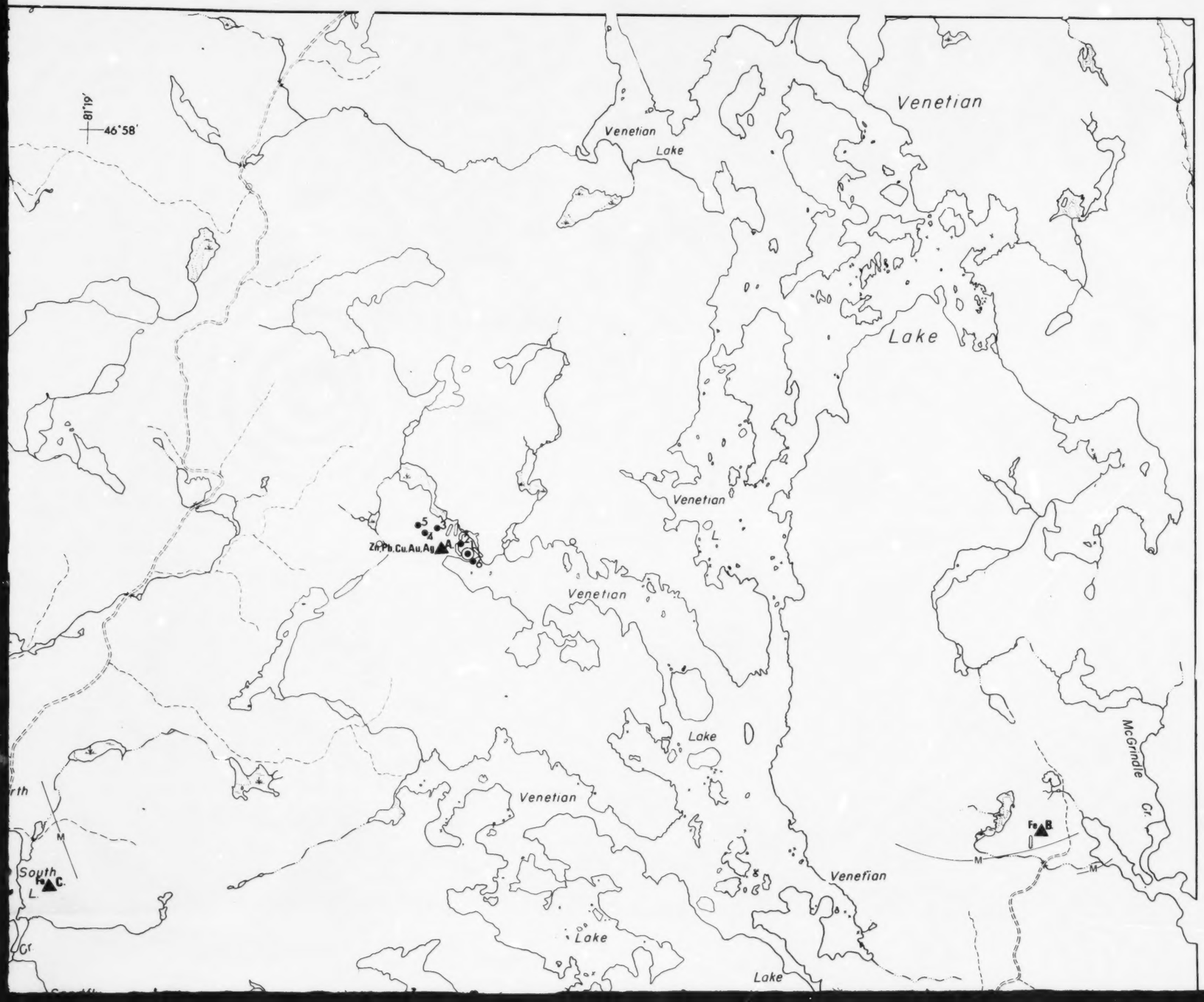
- ☐ ◆³ — Geochemical sample site, with reference number
- ☐ ◆³ — Area of geochemical sampling, with reference number
- ☐ ✶² — Age dating material sampling site, with reference number

GEOPHYSICAL ANOMALIES

- ☐ —AM— Airborne magnetic anomaly
- ☐ Airborne electromagnetic anomaly
  Length of anomaly along flight line
- ☐ Airborne electromagnetic anomaly
  Location of anomaly along flight line
- ☐ Airborne electromagnetic anomaly
  Conductor axis: definite, probable, possible
- ☐ —ARA— Airborne radiometric anomaly
- ■ —M— Ground magnetic anomaly
- ☐ —VL— Ground electromagnetic anomaly
  (VL - Vertical loop; HL - Horizontal loop
  VLF - Very low freq.; Turam; JEM -
  Crone Em - 16)
- ☐ —RA— Ground radiometric anomaly
- ☐ —IP— Induced polarization anomaly
- ☐ —SP— Self potential anomaly
- ☐ —AFMAG— Audio-frequency magnetic anomaly
  (total intensity)
- ☐ —R— Resistivity anomaly
- ☐ —GR— Gravity anomaly

MISCELLANEOUS DATA

81°19'
46°58'
Venetian
Lake
Zn,Pb,Cu,Au,Ag
North
South
McGrindle



Ministry of Northern Development and Mines

Ontario

Mines and Minerals Division

ONTARIO GEOLOGICAL SURVEY

EXPLORATION DATA MAP

GEOLOGICAL DATA INVENTORY FOLIO 485

(Map 2 of 2)

BOTHA TOWNSHIP

Scale 1:31 680

Kilometre 0.5 0 0.5 1 Kilometre

Mile 0.5 0 0.5 1 Mile

GEOLOGICAL AND MINING SYMBOLS

TYPES OF DATA SHOWN ON THIS MAP

MINERAL OCCURRENCES

- ■ cp A. — Mineral occurrence at surface, with reference letter
- □ Au A. 84' — Mineral occurrence with shaft, depth given with reference letter
- □ Ag A. — Mineral occurrence reported but exact location uncertain, with reference letter
- □ cp A. — Mineralized float with reference letter
- □ A. — Mineral occurrence in drillhole, with reference letter, and drillhole number

DRILLHOLES

- ■ •2 — Location of single drillhole, with reference number
- ■ ⊙2 — Location of closely spaced group of drillholes, with reference number

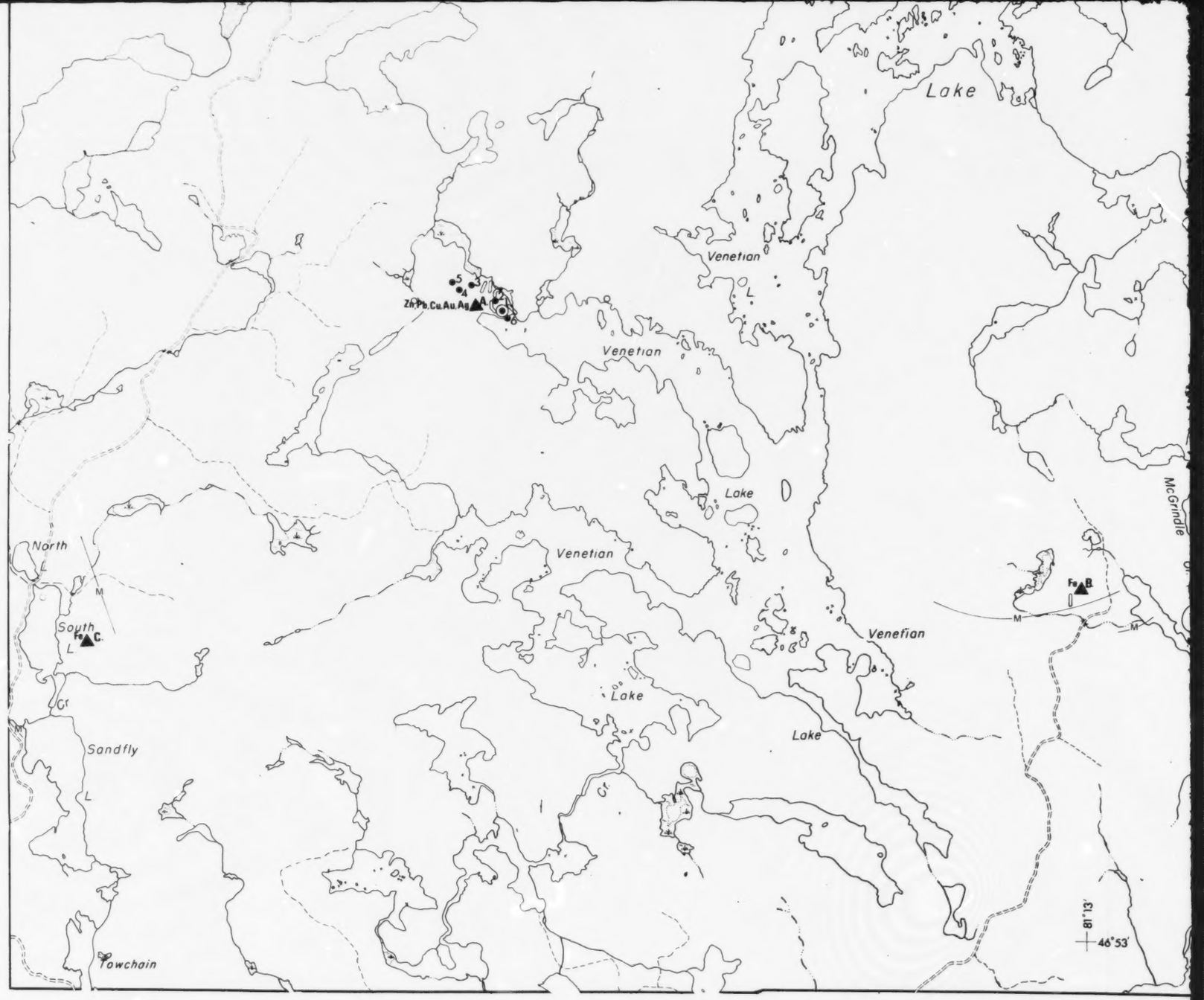
GEOPHYSICAL ANOMALIES

- ☐ -AM- Airborne magnetic anomaly
- ☐ Airborne electromagnetic anomaly
  Length of anomaly along flight line
- ☐ Airborne electromagnetic anomaly
  Location of anomaly along flight line
- ☐ Airborne electromagnetic anomaly
  Conductor axis: definite, probable, possible
- ☐ -ARA- Airborne radiometric anomaly
- ■ -M- Ground magnetic anomaly
- ☐ VL Ground electromagnetic anomaly
  (VL - Vertical loop; HL - Horizontal loop
  VLF - Very low freq.; Turam; JEM - Crone Em - 16)
- ☐ -RA- Ground radiometric anomaly
- ☐ -IP- Induced polarization anomaly
- ☐ -SP- Self potential anomaly
- ☐ -AFMAG- Audio-frequency magnetic anomaly
  (total intensity)
- ☐ -R- Resistivity anomaly
- ☐ -GR- Gravity anomaly

MISCELLANEOUS DATA

- ■ Trenching, pit
- ☐ Adit
- ☐ Open pit
- ☐ Rock quarry
- ☐ Sand and/or gravel pit
- ☐

NOTE: Consult the text that accompanies this map for pertinent lists of data, references, and abbreviations.



BOTHA TOWNSHIP

Scale 1:31 680

Kilometre 0.5 0 0.5 1 Kilometre

Mile 0.5 0 0.5 1 Mile

GEOLOGICAL AND MINING SYMBOLS

TYPES OF DATA SHOWN ON THIS MAP

MINERAL OCCURRENCES

- cp A. — Mineral occurrence at surface, with reference letter
- Au A. 84° — Mineral occurrence with shaft, depth given with reference letter
- Ag A. — Mineral occurrence reported but exact location uncertain, with reference letter
- cp A. — Mineralized float with reference letter
- A. — Mineral occurrence in drillhole, with reference letter, and drillhole number

DRILLHOLES

- ●² — Location of single drillhole, with reference number
- ◉² — Location of closely spaced group of drillholes, with reference number
- ⊙² — Drillhole, exact location uncertain, with reference number
- Property with underground drillholes in this general area with reference number
- ○² — Property with drillholes which have not been plotted on map, with reference number
- ⊕² — Reverse circulation drillhole; churn drilling, with reference number

Lake
Venetian
Zn,Pb,Cu,Au,Ag A
Venetian
Lake
Venetian
McGrindle Cr.
Fe B.
M
M
M
South C.
L
Venetian
Lake
Lake
Cr
Sandfly
L
Towchain
81°13'
46°53'